

Radiology notes urinary block

KUB X-ray

- plane X-ray shows
 1. stone in white color that occurs in kidney and around kidney
 2. detect instrument like catheter

IT gives general idea about urinary system

- Indications of KUB
 1. Stone diseases
 2. UTI
 3. Abdominal pain
- Preparation of patient before KUB

give laxative one day before

INTRAVENOUS UROGRAPHY (IVU).

- inject contrast media in vein then wait to be excreted by kidney if functioning
- (bladder should be empty)
- Scout film = guided by KUB
- Has 2 phases after injection
 1. Nephrogenic phase in first minute> shows only kidney parenchyma
 2. Pyelogenic phase after 5 minutes> collecting system, pelvis, ureters
(pyelo means pelvis)
- Position :
 - mostly AP
 - Prone films to see distal ureters

Cystogram

- inject die in catheter
- used to see the bladder (bladder should be filled)
- has two types

1- Voiding/Micturating cystourethrogram :

- a. mostly for in children with UTI
- b. indications:
 - i. urethra
 - ii. reflex diseases of bladder

2-retrograde urethrogram:

- a. indications:
 - i. urethritis
 - ii. stone of urethra
 - iii. trauma

Ultrasound

- most usable (1st line of intervention)
- U can see : kidney , bladder proximal and distal tubules ,
- Middle urethra can't be seen cus its behind intestine
- Indications:
 - Evaluate congenital anomalies.
 - hydronephrosis,
 - shows all type of stone

CT scan

- gold slandered technique
- indication :
 - trauma

MRI indications : tumor metastasis

Angiography

Visualization of blood vessels by injecting contrast media.

Nephrolithiasis: is a stone in the kidney